IN THE CLAIMS:

Amended claims follow.

- 1. (Currently Amended) A graphics system including a scene manager, geometric processor means, renderer means, hierarchical depth buffer means, and a far clipping plane, said system comprising means for updating said far clipping plane based on the farthest depth value in said hierarchical depth buffer means in a z-pyramid, if the farthest depth value in the z-pyramid is nearer than a depth of the far clipping plane.
- 2. (Currently Amended) A graphics system, comprising:
 a geometric processor;
 a hierarchical depth buffer;
 a renderer; and
 a far clipping plane that is capable of being updated substantially based on a
 farthest depth value in a z-pyramid, if the farthest depth value in the zpyramid is nearer than a depth of the far clipping plane.
- 3. (Original) The graphics system of claim 2, and further comprising a scene manager.
- 4. (Cancelled)
- 5. (Cancelled)
- 6. (Currently Amended) The graphics system of claim [5]2, wherein [the]a culling stage is coupled between the geometric processor and the renderer.
- 7. (Original) The graphics system of claim 2, wherein the far clipping plane is updated based on the farthest depth value.

- 8. (Currently Amended) A method for graphics processing, comprising: transforming geometry utilizing a geometric processor; performing a culling operation utilizing a hierarchical depth buffer; rendering utilizing a renderer; and updating a far clipping plane as a function of a farthest depth value in a z-pyramid, if the farthest depth value in the z-pyramid is nearer than a depth of the far clipping plane.
- 9. (Original) The method of claim 8, wherein a scene manager is in communication with the geometric processor.
- 10. (Cancelled)
- 11. (Cancelled)
- 12. (Currently Amended) The method of claim [11]8, wherein [the]a culling stage is coupled between the geometric processor and the renderer.
- 13. (Currently Amended) A computer program product embodied on a computer readable medium for graphics processing, comprising: computer code for transforming geometry; computer code for performing a culling operation-utilizing a hierarchical depth buffer; computer code for rendering; and computer code for updating a far clipping plane as a function of a farthest depth value in a z-pyramid, if the farthest depth value in the z-pyramid is nearer than a depth of the far clipping plane.
- 14. (Original) The computer program product of claim 13, and further comprising computer code for managing a scene.
- 15. (Cancelled)

- 16. (New) The graphics system of claim 2, wherein the updating includes resetting the far clipping plane to the farthest depth value.
- 17. (New) The graphics system of claim 2, wherein the farthest depth value is included in a tip of the z-pyramid.
- 18. (New) The graphics system of claim 17, wherein the tip of the z-pyramid further includes a coarsest NxN tile in the z-pyramid.
- 19. (New) The graphics system of claim 18, wherein the tip of the z-pyramid further includes additional levels of the z-pyramid.
- 20. (New) The graphics system of claim 17, wherein the tip of the z-pyramid includes a low-resolution z-pyramid with lower resolution than another z-pyramid maintained by a culling stage of the graphics system.
- 21. (New) The graphics system of claim 17, wherein the tip of the z-pyramid includes a low-resolution z-pyramid with lower resolution than another z-pyramid maintained by a hierarchical rendering stage of the graphics system.
- 22. (New) The graphics system of claim 17, wherein depth values of the z-pyramid are encoded.
- 23. (New) The graphics system of claim 22, wherein the depth values of the z-pyramid are encoded for reducing storage requirements thereof.
- 24. (New) The graphics system of claim 2, wherein the updating accelerates a culling of a box since a depth of a nearest corner of the box is farther than the farthest depth value.